



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,420	04/19/2001	Frederic Bauchot	FR920000032US1	3568
50170	7590	07/05/2006	EXAMINER	
IBM CORP. (WIP)			STEVENS, ROBERT	
c/o WALDER INTELLECTUAL PROPERTY LAW, P.C.				
P.O. BOX 832745			ART UNIT	
RICHARDSON, TX 75083			PAPER NUMBER	
			2176	

DATE MAILED: 07/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/838,420	<b>Applicant(s)</b> BAUCHOT ET AL.	
	<b>Examiner</b> Robert Stevens	<b>Art Unit</b> 2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-9 and 12-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-9, and 12-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/20/06</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. This action is responsive to communications: amendment filed 5/12/2006.
2. This action is **NON-FINAL**.
3. The Office withdraws the previous rejections of claims under 35 U.S.C. §101, in light of the amendment.
4. The Office withdraws the previous rejections of claims under 35 U.S.C. §112-2<sup>nd</sup> paragraph, in light of the amendment.
5. The Office withdraws the previous rejections of the claims under 35 U.S.C. §103(a) as being unpatentable over Kelly in view of Deitel, in light of the amendment.
6. New rejections of the claims under 35 USC §103(a) have been set forth below.
7. Claims 1-5, 7-9 and 12-23 are pending. Claims 1, 15 and 21 are independent. Claims 6 and 10-11 have been cancelled.

***Specification***

**8. Claims 1 and 15 are objected to because of the following informalities:**

Claim 1 line 18 and claim 15 line 18 appear to be missing the word "the" ("selected user option in [the] content"). Appropriate correction is required.

**9. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o).**

Correction of the following is required:

Newly submitted claims 21-23 contain the terminology "computer program product". This terminology was not presented/defined in the as-filed specification.

***Claim Rejections - 35 USC § 112***

**10. The following is a quotation of the first paragraph of 35 U.S.C. 112:**

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**11. Claims 3, 5, 8-9, 14, 17, 19 and 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.**

**Regarding claim 3**, the terminology “user controls portion” and “control elements” in line 7 was not found in the as-filed specification. I.e., there is no support for such terminology in the as-filed specification.

**Regarding claim 8**, the terminology “virtual buttons” in line 4 was not found in the as-filed specification. I.e., there is no support for such terminology in the as-filed specification.

**Claims 5, 8-9 and 14** depend on claim 3, and therefore are likewise rejected.

**Claim 9** depends upon claim 8, and therefore is likewise rejected.

**Claims 17 and 22** are substantially similar to claim 3, and therefore likewise rejected.

**Claim 19** depends upon claim 17, and therefore is likewise rejected.

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. **Claims 3-5, 7-9, 14, 17-20 and 22-23 are rejected under 35 U.S.C. 112, second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Claim 3** recites the limitations “user controls portion” and “control elements” in line 7. There is insufficient antecedent basis for this limitation in the claim (i.e., no support for such terminology in the as-filed specification).

**Claim 4** recites the limitation “a value corresponding to a Boolean variable state” in line 8. This language is vague and indefinite because the Boolean variable state value was previously selected by the user. The claimed limitation is directed to any Boolean variable state.

**Claim 7** recites the limitation “numerical one” in lines 3-4. This terminology is confusing, as it can be interpreted as meaning “a number” (i.e., “of the numerical kind”) or “the number 1”. For the purposes of further examination, the limitation is interpreted as meaning that a Boolean true is equated with “1”. Additionally, parent claim 1 refers to the first and second Boolean variable states. As such, there is a lack of antecedent basis for the terminology “the Boolean variable state”.

**Claim 8** recites the limitation “virtual buttons” in line 4. There is insufficient antecedent basis for this limitation in the claim (i.e., no support for such terminology in the as-filed specification).

**Claim 20** is substantially similar to claim 7, and therefore likewise rejected.

**Claims 18 and 23** are substantially similar to claim 4, and therefore likewise rejected.

**Claims 5, 8-9 and 14** depend on claim 3, and therefore are likewise rejected.

**Claim 7** depends upon claim 4, and therefore is likewise rejected.

**Claim 9** depends upon claim 8, and therefore is likewise rejected.

**Claims 17 and 22** are substantially similar to claim 3, and therefore likewise rejected.

**Claims 19-20** depend upon claims 17-18, respectively, and therefore are likewise rejected.

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. **Claims 1-3, 12-14 and 21-22 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Kaneko et al. (US Patent No. 5,708,827, filed Sep. 18, 1995 and issued Jan. 13, 1998, hereafter referred to as "Kaneko") in view of Kjaer et al. (US Patent Application Publication No. 2002/0091728, filed Dec. 6, 1995 and published Jul. 11, 2002, hereafter referred to as "Kjaer") and further in view of Brian W. Kernighan et al. (The C Programming Language, Prentice-Hall, Inc., Englewood Cliffs, NJ, © 1978, page 41, hereafter referred to as "Kernighan").

**Independent claim 1 states:**

*A method in a computer system, for processing user defined Boolean variables in a multidimensional electronic spreadsheet comprising a plurality of cells identified by a cell address along each dimension, said method comprising the steps of:*

*providing, in the computer system, a user options table data structure identifying one or more user options that are defined as Boolean variables, wherein the user options table data structure comprises a record for each user option of the one or more user options, and wherein each record stores an identifier associated with a corresponding user option for the record;*



*providing a user interface, in the computer system, through which the one or more user options are defined, wherein a status of the one or more user options is set via the user interface to either a first Boolean variable state corresponding to a "True" state or a second Boolean variable state corresponding to a "False" state;*

*referencing a selected user option of the one or more user options in one or a plurality of cells of the multi-dimensional electronic spreadsheet by including an identifier associated with the selected user option in content of the one or a plurality of cells;*

*determining a value of each of the one or plurality of cells based on a status of the selected user option as either being the first Boolean variable state or the second Boolean variable state, as specified via the user interface; and*

*providing an output of the multi-dimensional electronic spreadsheet via an output device of the computer system.*

Regarding these limitations ...

Kaneko teaches a Merchandise Sales Table in Figure 2A, disclosing "Merchandise a" through "Merchandise c" identifiers in rows or records in the Merchandise Sales Table, wherein the "Merchandise a" through "Merchandise c" options are associated with variables (e.g., unit price). Kaneko teaches the spreadsheet graphical user interface (GUI) in Figures 2A and 3A for entering data, noting that data values for "unit price", for example, are set/changed via the user editing the appropriate spreadsheet cell. Kaneko discloses referencing "unit price" and "sales volume" variables in order to determine the value of "sales amount of money" In Figure 2A and column 4 lines 27-36. Kaneko also discloses the display of a spreadsheet in Figure 2A, showing a spreadsheet window, and the Abstract, discussing spreadsheet display on a display device.

However, Kaneko does not explicitly teach multi-dimensional spreadsheets.

Kjaer, though, teaches multidimensional spreadsheets in [0008], disclosing visualizing a series of two-dimensional spreadsheets as a notebook having a plurality of pages (i.e., the conventionally known “multi-dimensional” spreadsheet). Kjaer also teaches multidimensional spreadsheets in [0009], disclosing a three-dimensional spreadsheet having data, charts and formulas for generating charts on each spreadsheet.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Kjaer for the benefit of Kaneko, because to do so would have allowed a programmer to address spreadsheet cells by a different number of variables, thereby minimizing memory and processing time requirements in a multi-dimensional electronic spreadsheet system, as taught by Kjaer in the Abstract. These references were all applicable to the same field of endeavor, i.e., spreadsheet applications.

Additionally, Kaneko does not explicitly teach the use of Boolean variable states. Kernighan, though, teaches the well-known programming concept of Boolean variable states, disclosing the use of 0 to represent a “False” state and 1 to represent a “True” state.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Kernighan for the benefit of Kaneko in view of Kjaer, because to do so would have allowed a programmer to test for a condition (i.e., whether a condition was true), as taught by Kernighan in the first paragraph on page 41. These

references were all applicable to the same field of endeavor, i.e., computer programming.

**Regarding dependent claim 2:** Kaneko teaches a spreadsheet table of records in Figure 2A, disclosing a spreadsheet table of records having fields for the type of merchandise, a price option associated with the record (labeled as "unit price") and a value for each unit price record field (e.g., 150). The specific data/fields employed in a record were an obvious variant to one skilled in the art at the time of the invention.

**Regarding dependent claim 3:** Kaneko teaches a spreadsheet table of records in Figure 2A, in which user options (e.g., "sales price") is listed for the current status of the record, and a field is selected and modified directly by a user, with those modifications being reflected in the updating of the "sales amount of money" field of the modified record. Figure 1 further shows a calculation formula list display unit for listing formula options #25, a reference area extracting unit #23 for identifying the current status of user option values, and a calculation formula control unit #24 for updating the status of a "sales amount of money" field.

**Regarding dependent claim 12:** Kaneko teaches the output of a spreadsheet showing a scenario in Figure 2A, showing a window in which the "sales amount of money" depends upon the scenario presented regarding the values of the "unit price" and "sales value" data status.

However, Kaneko does not explicitly teach multi-dimensional spreadsheets. Kjaer, though, teaches multidimensional spreadsheets in [0008], disclosing visualizing a series of two-dimensional spreadsheets as a notebook having a plurality of pages (i.e., the conventionally known “multi-dimensional” spreadsheet). Kjaer also teaches multidimensional spreadsheets in [0009], disclosing a three-dimensional spreadsheet having data, charts and formulas for generating charts on each spreadsheet.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Kjaer for the benefit of Kaneko in view of Kernighan, because to do so would have allowed a programmer to address spreadsheet cells by a different number of variables, thereby minimizing memory and processing time requirements in a multi-dimensional electronic spreadsheet system, as taught by Kjaer in the Abstract. These references were all applicable to the same field of endeavor, i.e., spreadsheet applications.

**Regarding dependent claim 13:** Kaneko teaches the output of a spreadsheet via a user display device in Figure 2A, showing a spreadsheet window, in the context of Figure 1 #3, a display device.

However, Kaneko does not explicitly teach multi-dimensional spreadsheets. Kjaer, though, teaches multidimensional spreadsheets in [0008], disclosing visualizing a series of two-dimensional spreadsheets as a notebook having a plurality of pages (i.e., the conventionally known “multi-dimensional” spreadsheet). Kjaer also teaches

multidimensional spreadsheets in [0009], disclosing a three-dimensional spreadsheet having data, charts and formulas for generating charts on each spreadsheet.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Kjaer for the benefit of Kaneko in view of Kernighan, because to do so would have allowed a programmer to address spreadsheet cells by a different number of variables, thereby minimizing memory and processing time requirements in a multi-dimensional electronic spreadsheet system, as taught by Kjaer in the Abstract. These references were all applicable to the same field of endeavor, i.e., spreadsheet applications.

**Regarding dependent claim 14:** Kaneko teaches the presentation of an ordered list in Figure 2A, showing a spreadsheet window having an ordered list of merchandise (ordered from a-c, c being the last entry).

**Independent claim 21** is directed to a computer program product for implementing the method of claim 1. As such, this claim is substantially similar to claim 1, and therefore likewise rejected.

**Claim 22** is substantially similar to claim 3, and therefore likewise rejected.

16. **Claims 4, 7, 15-18, 20 and 23 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Kaneko et al. (US Patent No. 5,708,827, filed Sep. 18, 1995 and issued Jan. 13, 1998, hereafter referred to as "Kaneko") in view of Kjaer et al. (US Patent Application Publication No. 2002/0091728, filed Dec. 6, 1995 and published Jul. 11, 2002, hereafter referred to as "Kjaer") and further in view of Brian W. Kernighan et al. (The C Programming Language, Prentice-Hall, Inc., Englewood Cliffs, NJ, © 1978, page 41, hereafter referred to as "Kernighan") and Michelman et al. (US Patent No. 5,987,481, filed Jul. 1, 1997 and issued Nov. 16, 1999, hereafter referred to as "Michelman").

**Regarding dependent claim 4:** Kaneko does not explicitly teach the use of ranges. Michelman, though, teaches the use of ranges in the Abstract and column 9 lines 55-58, discussing the use of a label to represent a range of cells.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Michelman for the benefit of Kaneko in view of Kjaer and Kernighan, because to do so would have allowed a programmer to reference a range of cells in a spreadsheet formula, as taught by Michelman in the Abstract. These references were all applicable to the same field of endeavor, i.e., computer programming.

**Regarding dependent claim 7:** Kaneko does not explicitly teach the use of Boolean variable states. Kernighan, though, teaches the well-known programming concept of Boolean variable states, disclosing the use of 0 to represent a "False" state and 1 to represent a "True" state.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Kernighan for the benefit of Kaneko in view of Kjaer and Michelman, because to do so would have allowed a programmer to test for a condition (i.e., whether a condition was true), as taught by Kernighan in the first paragraph on page 41. These references were all applicable to the same field of endeavor, i.e., computer programming.

**Independent claim 15 states:**

*A computing system for processing user defined Boolean variables in a multidimensional electronic spreadsheet comprising a plurality of cells identified by a cell address along each dimension, the computing system comprising:*

*a processor;*

*a storage device coupled to the processor, wherein the storage device provides a user options table data structure identifying one or more user options that are defined as Boolean variables, wherein the user options table data structure comprises a record for each user option of the one or more user options, and wherein each record stores an identifier associated with a corresponding user option for the record;*

*a memory coupled to the processor, wherein the memory contains instructions which, when executed by the processor, cause the processor to:*

*provide a user interface through which one or more user options are defined, wherein a status of the one or more user options is set via the user interface to either a first Boolean variable state corresponding to a "True" state or a second Boolean variable state corresponding to a "False" state;*

*reference a selected user option of the one or more user options in one or a plurality of cells of the multi-dimensional*

*electronic spreadsheet by including an identifier associated with the selected user option in content of the one or a plurality of cells; determine a value of each of the one or plurality of cells based on a status of the selected user option as either being the first Boolean variable state or the second Boolean variable state, as specified via the user interface; and provide an output of the multi-dimensional electronic spreadsheet via an output device of the computer system.*

Regarding these limitations ...

Kaneko teaches a Merchandise Sales Table in Figure 2A, disclosing “Merchandise a” through “Merchandise c” identifiers in rows or records in the Merchandise Sales Table, wherein the “Merchandise a” through “Merchandise c” options are associated with variables (e.g., unit price). Kaneko teaches the spreadsheet graphical user interface (GUI) in Figures 2A and 3A for entering data, noting that data values for “unit price”, for example, are set/changed via a user editing the appropriate spreadsheet cell. Kaneko discloses referencing “unit price” and “sales volume” variables in order to determine the value of “sales amount of money” In Figure 2A and column 4 lines 27-36. Kaneko also discloses the display of a spreadsheet in Figure 2A, showing a spreadsheet window, and the Abstract, discussing spreadsheet display on a display device.

However, Kaneko does not explicitly teach multi-dimensional spreadsheets. Kjaer, though, teaches multidimensional spreadsheets in [0008], disclosing visualizing a series of two-dimensional spreadsheets as a notebook having a plurality of pages (i.e., the conventionally known “multi-dimensional” spreadsheet). Kjaer also teaches



Art Unit: 2176

multidimensional spreadsheets in [0009], disclosing a three-dimensional spreadsheet having data, charts and formulas for generating charts on each spreadsheet.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Kjaer for the benefit of Kaneko, because to do so would have allowed a programmer to address spreadsheet cells by a different number of variables, thereby minimizing memory and processing time requirements in a multi-dimensional electronic spreadsheet system, as taught by Kjaer in the Abstract. These references were all applicable to the same field of endeavor, i.e., spreadsheet applications.

Additionally, Kaneko does not explicitly teach the use of Boolean variable states. Kernighan, though, teaches the well-known programming concept of Boolean variable states, disclosing the use of 0 to represent a "False" state and 1 to represent a "True" state.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Kernighan for the benefit of Kaneko in view of Kjaer, because to do so would have allowed a programmer to test for a condition (i.e., whether a condition was true), as taught by Kernighan in the first paragraph on page 41. These references were all applicable to the same field of endeavor, i.e., computer programming.

Additionally, Kaneko does not explicitly teach the use of a processor, memory and storage. Michelman, though, teaches the use of a processor, memory and storage in Figure 1, showing a processing unit #14, random access memory #17, and a hard disk drive and interface (#20 and 21) for storage.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Michelman for the benefit of Kaneko in view of Kjaer and Kernighan, because to do so would have allowed a programmer to test for a condition (i.e., whether a condition was true), as taught by Kernighan in the first paragraph on page 41. These references were all applicable to the same field of endeavor, i.e., computer programming.

**Regarding dependent claim 16:** Kaneko teaches a spreadsheet table of records in Figure 2A, disclosing a spreadsheet table of records having fields for the type of merchandise, a price option associated with the record (labeled as "unit price") and a value for each unit price record field (e.g., 150). The specific data/fields employed in a record were an obvious variant to one skilled in the art at the time of the invention.

**Regarding dependent claim 17:** Kaneko teaches a spreadsheet table of records in Figure 2A, in which user options (e.g., "sales price") is listed for the current status of the record, and a field is selected and modified directly by a user, with those modifications being reflected in the updating of the "sales amount of money" field of the modified record. Figure 1 further shows a calculation formula list display unit for listing

formula options #25, a reference area extracting unit #23 for identifying the current status of user option values, and a calculation formula control unit #24 for updating the status of a "sales amount of money" field.

**Claims 18 and 20** are substantially similar to claims 4 and 7, respectively, and therefore likewise rejected.

**Claim 23** is substantially similar to claim 4, and therefore likewise rejected.

17. **Claims 5, 8-9 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Kaneko et al. (US Patent No. 5,708,827, filed Sep. 18, 1995 and issued Jan. 13, 1998, hereafter referred to as "Kaneko") in view of Kjaer et al. (US Patent Application Publication No. 2002/0091728, filed Dec. 6, 1995 and published Jul. 11, 2002, hereafter referred to as "Kjaer") and further in view of Brian W. Kernighan et al. (The C Programming Language, Prentice-Hall, Inc., Englewood Cliffs, NJ, © 1978, page 41, hereafter referred to as "Kernighan") and Julia Kelly (Using Microsoft Excel 97, 3<sup>rd</sup> Edition, Que Corp., Indianapolis, IN, © 1998, pages 118-122, hereafter referred to as "Kelly"). Note that pages 124-131, 138-144, 154-189, 209-210 and 337-343 of the Kelly reference were provided with the Office Action mailed 1/27/2005.

**Regarding dependent claims 5 and 8-9:** Kaneko does not explicitly teach the use of an editor or GUI buttons/dialog boxes. Kelly, though, teaches direct editing of cells in Figure 8.1 of page 118, disclosing direct spreadsheet cell editing. Kelly further teaches the use of gui buttons and dialog boxes in Figure 8.4 of page 122.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Kelly for the benefit of Kaneko in view of Kjaer and Kernighan, because to do so would have allowed a user to replace data in formulas, as taught by Kelly in the last paragraph on page 120. These references were all applicable to the same field of endeavor, i.e., computer programming.

18. **Claim 19 is rejected under 35 U.S.C. 103(a)** as being unpatentable over Kaneko et al. (US Patent No. 5,708,827, filed Sep. 18, 1995 and issued Jan. 13, 1998, hereafter referred to as "Kaneko") in view of Kjaer et al. (US Patent Application Publication No. 2002/0091728, filed Dec. 6, 1995 and published Jul. 11, 2002, hereafter referred to as "Kjaer") and further in view of Brian W. Kernighan et al. (The C Programming Language, Prentice-Hall, Inc., Englewood Cliffs, NJ, © 1978, page 41, hereafter referred to as "Kernighan") and Michelman et al. (US Patent No. 5,987,481, filed Jul. 1, 1997 and issued Nov. 16, 1999, hereafter referred to as "Michelman") and Julia Kelly (Using Microsoft Excel 97, 3<sup>rd</sup> Edition, Que Corp., Indianapolis, IN, © 1998, pages 118-122, hereafter referred to as "Kelly"). Note that pages 124-131, 138-144,

154-189, 209-210 and 337-343 of the Kelly reference were provided with the Office Action mailed 1/27/2005.

**Regarding dependent claim 19:** Kaneko does not explicitly teach the use of an editor. Kelly, though, teaches direct editing of cells in Figure 8.1 of page 118, disclosing direct spreadsheet cell editing.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Kelly for the benefit of Kaneko in view of Kjaer and Kernighan, because to do so would have allowed a user to replace data in formulas, as taught by Kelly in the last paragraph on page 120. These references were all applicable to the same field of endeavor, i.e., computer programming.

### ***Response to Arguments***

19. It is noted that the amendment substantially changes the scope of the claimed subject matter.

Applicant's arguments regarding 35 USC §§35 USC 101 and 112-2<sup>nd</sup> paragraph are considered moot in light of the claim amendments and the withdrawal of the previous rejections under these sections.

Applicant has not argued the rejections under 35 USC §103(a), however, the Office has set forth new rejections, in light of the claim amendments.

### ***Conclusion***

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

#### **Non-patent Literature**

Microsoft Press Computer Dictionary, 3<sup>rd</sup> Edition, Microsoft Press, Redmond, WA, © 1997, pp. 30, 133 and 399.

#### ***US Patents***

Ammirato et al	6,564,255
Igra et al	6,701,485
Comer et al	6,055,548
Anderson et al	6,282,551
Clancey et al	6,292,811
Yoshikawa	6,327,592
Greif et al	5,371,675
Capson et al	5,701,499
Yamashita et al	5,881,381
West et al	5,418,902
Yamada et al	5,504,848
Comer et al	5,819,293
Spencer et al	5,603,021
Reiter et al	5,713,020

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Stevens whose telephone number is (571) 272-4102. The examiner can normally be reached on M-F 6:00 - 2:30.

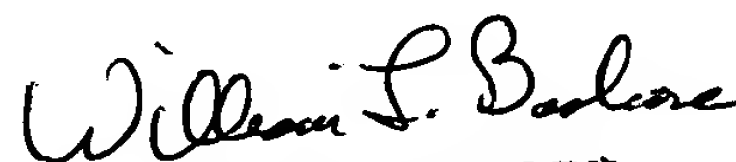
Art Unit: 2176

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather R. Herndon can be reached on (571) 272-4136. The current fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Additionally, the main number for Technology Center 2100 is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert Stevens  
Art Unit 2176  
Date: June 23, 2006

rs

  
**WILLIAM BASHORE**  
**PRIMARY EXAMINER**